

1. A server-based method of automatically generating a plurality of bids for an advertiser for placement of at least one advertisement in association with a search results list, the search results list generated in response to a search query, the method including the steps:

a) receiving at least one candidate advertisement from the advertiser;

b) creating a list of candidate keywords associated with the at least one candidate advertisement;

c) estimating a click-through rate for each advertisement-keyword pair from the at least one candidate advertisement and candidate keywords;

d) calculating a return on advertising investment (ROAI) for each advertisement-keyword pair; and

e) calculating a bid amount for each advertisement-keyword pair.

2. The method as set forth in claim 1 wherein at least two advertisements are received from the advertiser in receiving step a).

3. The method as set forth in claim 1 wherein the list of candidate keywords is provided by the advertiser.

4. The method as set forth in claim 1 wherein the list of candidate keywords is automatically generated at least in part from at least one keyword provided by the advertiser.

5. The method as set forth in claim 1 wherein the list of candidate keywords is automatically generated at least in part from content in an advertiser web site.

6. The method as set forth in claim 1 wherein the list of candidate keywords is automatically generated at least in part from content of the at least one candidate advertisement.

7. The method as set forth in claim 1 wherein the list of candidate keywords is automatically generated at least in part from one or more of at least one keyword provided by the advertiser, content in an advertiser web site, and content of the at least one candidate advertisement.

8. The method as set forth in claim 1 wherein the click-through rate for each advertisement-keyword pair is estimated by placing the advertisement in the search results list on a trial basis.

9. The method as set forth in claim 1 wherein the click-through rate for each advertisement-keyword pair is estimated using an algorithm to estimate the relevance of advertisement content to the keyword for the advertisement-keyword pair.

10. The method as set forth in claim 1 wherein the estimated click-through rate for each advertisement-keyword pair is continuously revised based on actual search queries, search results lists, and click-throughs corresponding to the advertisement-keyword pair.

11. The method as set forth in claim 1, the ROAI calculating step d) further including the steps:

f) tracking the advertisement-keyword pair at the time a user clicks on the corresponding advertisement in the search results list;

g) tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the search results list; and

h) associating the tracked advertisement-keyword pair clicks with the tracked revenue events and corresponding revenue amounts.

12. The method as set forth in claim 11 wherein tracking the advertisement-keyword pair is accomplished at least in part by using one or more of a tracking URL, a form, and a cookie.

13. The method as set forth in claim 11 wherein the revenue event includes at least one of a sale, a lead generation, and a form submission.

14. The method as set forth in claim 11 wherein the revenue event and corresponding revenue amount are stored in a database associated with the advertiser web site.

15. The method as set forth in claim 11 wherein an image bug is placed on the advertiser web site and the revenue event and corresponding revenue amount are stored in a service provider web site.

16. The method as set forth in claim 11 wherein the revenue event and corresponding revenue amount is stored in a database associated with the advertiser web site.

17. The method as set forth in claim 11 wherein the ROAI calculating step further includes the step:

i) receiving the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts.

18. The method as set forth in claim 17 wherein the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts are received by at least one of FTP data transfer and web services.

19. The method as set forth in claim 11 wherein the ROAI calculating step further includes the step:

i) considering the relevance of the advertiser web site to the advertisement-keyword combination.

20. The method as set forth in claim 11 wherein the ROAI calculating step further includes the step:

i) considering an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list, wherein the experience level is in relation to at least one of the advertisement in the advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser.

21. The method as set forth in claim 1 wherein the calculated ROAI for each advertisement-keyword pair is received from the advertiser.

22. The method as set forth in claim 1 wherein the calculated ROAI resulting from step d) is used as the calculated bid amount in step e).

23. The method as set forth in claim 1 wherein the plurality of bids are optimized.

24. The method as set forth in claim 23, further including the step:  
f) recommending an optimal set of bid combinations with respect to profitability for the advertiser creating a corresponding automatic insertion order for placing the advertisement-keyword combinations.

25. The method as set forth in claim 24 wherein the set of bid combinations is sorted by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order.

26. The method as set forth in claim 24 wherein the advertiser constrains the set of bid combinations by at least one of an advertisement budget and a capacity budget.

27. The method as set forth in claim 26 wherein the advertiser constraint is a maximum budget amount for a predetermined period of time.

28. The method as set forth in claim 26 wherein the advertiser constraint is a desired number of click-throughs for a predetermined period of time.

29. The method as set forth in claim 26 wherein the advertiser constraint is at least one of a multiplier of ROAI and a desired profit margin with respect to ROAI.

30. The method as set forth in claim 26 wherein the advertiser constraint is at least one of a maximum budget amount for a predetermined period of time, a desired number of click-throughs for a predetermined period of time, a multiplier of ROAI, and a desired profit margin with respect to ROAI.

31. A server-based apparatus for automatically generating a plurality of bids for an advertiser for placement of at least one advertisement in association with a search results list, the search results list generated in response to a search query, the apparatus including:

- a sponsored results database for receiving at least one candidate advertisement from the advertiser;

- a keyword identification system for creating a list of candidate keywords associated with the at least one candidate advertisement;

- an advertisement-keyword selection system in communication with the sponsored results database and keyword identification system for estimating a click-through rate for each advertisement-keyword pair from the at least one

candidate advertisement and candidate keywords and calculating a return on advertising investment (ROAI) for each advertisement-keyword pair; and

a bid determination system in communication with the advertisement-keyword selection system for calculating a bid amount for each advertisement-keyword pair.

32. The apparatus as set forth in claim 30 wherein the keyword identification automatically generates at least part of the list of candidate keywords from one or more of at least one keyword provided by the advertiser, content in an advertiser web site, and content of the at least one candidate advertisement.

33. The apparatus as set forth in claim 30, the advertisement-keyword selection system further including:

an ROAI agent for tracking the advertisement-keyword pair at the time a user clicks on the corresponding advertisement in the search results list, tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the search results list, and associating the tracked advertisement-keyword pair clicks with the tracked revenue events and corresponding revenue amounts.

34. The apparatus as set forth in claim 33 wherein the ROAI agent also receives the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts.

35. The apparatus as set forth in claim 33 wherein the ROAI agent also considers the relevance of the advertiser web site to the advertisement-keyword combination.

36. The apparatus as set forth in claim 33 wherein the ROAI agent also considers an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search

results list, wherein the experience level is in relation to at least one of the advertisement in the advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser.

37. The apparatus as set forth in claim 30 wherein the plurality of bids determined by the bid determination system are optimized.

38. The apparatus as set forth in claim 37 wherein the bid determination system recommends an optimal set of bid combinations with respect to profitability for the advertiser creating a corresponding automatic insertion order for placing the advertisement-keyword combinations.

39. The apparatus as set forth in claim 38 wherein the bid determination system sorts the optimal set of bid combinations by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order.

40. A server-based method of automatically generating a plurality of bids for an advertiser for placement of at least one advertisement in association with a at least one publisher web page, the method including the steps:

- a) receiving at least one candidate advertisement from the advertiser;
- b) creating a list of candidate keywords associated with the at least one candidate advertisement;
- c) creating a list of least one candidate publisher web pages having one or more auctioned advertisement position;
- d) estimating a click-through rate for each advertisement-publisher web page pair from the at least one candidate advertisement and candidate publisher web pages;

e) calculating a return on advertising investment (ROAI) for each advertisement-publisher web page pair; and

f) calculating a bid amount for each advertisement-publisher web page pair.

41. The method as set forth in claim 40, the ROAI calculating step d) further including the steps:

g) tracking the advertisement-publisher web page pair at the time a user clicks on the corresponding advertisement in the publisher web page;

h) tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the publisher web page; and

i) associating the tracked advertisement-publisher web page pair clicks with the tracked revenue events and corresponding revenue amounts.

42. A server-based method of generating a bid for an advertiser for placement of an advertisement in association with a search results list, the search results list generated in response to a search query, the method including the steps:

a) receiving at least one advertisement to be associated with the bid from the advertiser;

b) receiving a selection of one or more keywords from the advertiser and associating the one or more selected keywords with the bid; and

c) calculating a recommended amount to bid for placement of the selected advertisement in conjunction with the one or more selected keywords to the advertiser, wherein the search query is associated with the one or more selected keywords.

43. The method as set forth in claim 42, further including:

d) receiving a selection of an amount to bid for placement of the selected advertisement in the search results list generated in response to the



search query associated with the one or more selected keywords from the advertiser.

44. The method as set forth in claim 42 wherein the advertisement was selected by an advertiser associated with the advertisement and was selected at least in part by matching content of the advertisement to the one or more keywords, wherein the matching of content is at least partially automated.

45. The method as set forth in claim 43, further including:

e) recommending a plurality of keywords related to the advertisement to the advertiser; and

f) recommending that one or more of the plurality of keywords be associated with the bid to the advertiser, wherein the search query is associated with the one or more recommended keywords.

46. The method as set forth in claim 45, further including:

g) receiving information from an advertiser web site associated with the advertisement, wherein the advertiser web site information includes at least web site visits and web site sales; and

h) determining return on advertising investment (ROAI) information for at least the selected advertisement and the one or more keywords at least in part from the advertiser web site information, wherein the ROAI information is considered in recommending step c).

47. The method as set forth in claim 43, further including:

e) receiving information from a user associated with the advertiser via an input device, wherein the user information is considered in recommending step c) to determine the amount to recommend to the advertiser for the bid.

48. The method as set forth in claim 43, further including:

e) receiving information from a keyword search engine associated with the search results list, wherein the keyword search engine information is

associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the keyword search engine information is considered in recommending step c).

49. The method as set forth in claim 43, further including:

e) receiving information from a advertising aggregator associated with the search results list, wherein the advertising aggregator information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the advertising aggregator information is considered in recommending step c).

50. The method as set forth in claim 43, further including:

e) receiving information from a bidding service provider associated with the search results list, wherein the bidding service provider information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the bidding service provider information is considered in recommending step c).

51. The method as set forth in claim 43, further including:

e) receiving information from an advertiser web site associated with the advertisement, wherein the advertiser web site information is considered in recommending step c).

52. The method as set forth in claim 43, further including:

e) receiving information from a competitor web site associated with a competitor in relation to the advertiser, wherein the competitor web site information is considered in recommending step c).

53. The method as set forth in claim 43, further including:

e) receiving information from an advertiser web site associated with the advertisement, wherein the advertiser web site information includes at least web site visits and web site sales; and

f) determining return on advertising investment (ROAI) information for at least the selected advertisement and the one or more keywords at least in part from the advertiser web site information, wherein the ROAI information is considered in recommending step c).

54. A method of determining a return on advertising investment (ROAI) information for an advertiser for at least an advertisement and one or more keywords associated with the advertisement in conjunction with a bid for placement of the advertisement in a search results list associated with a keyword search engine, wherein the search results list is generated in response to a search query, the method including the steps:

a) receiving information from a user associated with the advertiser via an input device;

b) receiving information from an advertiser web site associated with the advertisement; and

c) determining the ROAI information based at least in part on one of the user information and the advertiser web site information.

55. The method as set forth in claim 54 wherein step c) also determines ROAI information for each of a plurality of combinations of one or more keywords from the plurality of keywords.

56. The method as set forth in claim 54 wherein step c) also determines ROAI information for each of a plurality of advertisements in conjunction with each of a plurality of combinations of one or more keywords from the plurality of keywords.

57. A server-based computer program product for use with an apparatus for generating a bid for an advertiser for placement of an advertisement in association with a search results list, wherein the search results list is generated in response to a search query, the computer program product including:

a computer usable medium having computer readable program code embodied in the medium for causing:

- i) selection of a plurality of keywords;
- ii) selection of an advertisement to be associated with the bid;

- iii) association of one or more of the plurality of keywords with the bid, wherein the search query is associated with the one or more keywords; and

- iv) determination of an amount to bid for placement of the selected advertisement in relation to the search results list generated in response to the search query associated with the one or more keywords;

wherein at least one of the selection of the plurality of keywords, selection of the advertisement, association of one or more of the plurality of keywords with the bid, and determination of the amount to bid is based at least in part on user information received a keyword advertisement management system associated with the medium.